

Amendments to Specification

The specification is amended in the following manner:

At page 2, last two paragraphs, amend in the following manner:

Peptides of the invention which bind to Bacillus anthracis have the sequence Thr-Ser-Gln-Asn-Val-Arg-Thr (TSQNVRT) (Seq. ID No. 40) or of the general formula Thr-Tyr-Pro-X-Pro-X-Arg (TYPXPXR) (Seq. ID No. 82) wherein X is a hydrophobic residue. Preferred residues are of the sequence Thr-Tyr-Pro-Ile-Pro-Ile-Arg (TYPIPIR) (Seq. ID No. 41), Thr-Tyr-Pro-Ile-Pro-Phe-Arg (TYPIPFR) (Seq. ID No. 42), and Thr-Tyr-Pro-Val-Pro-His-Arg (TYPVPHR) (Seq. ID No. 43).

Peptides which bind Bacillus cereus having sequences Val-Thr-Ser-Arg-Gly-Asn-Val (VTSRGNV) (Seq. ID No. ~~45~~ 100) and consensus peptides of the formula Ser-Pro-Leu-X₁-X₂-His wherein X₁ is His or Arg and X₂ is Arg or Lys (SPLX₁X₂H) (Seq. ID No. 82) were also identified.

The specification had been previously amended, especially on November 9, 2000, to assign new numbers to the sequences and to correct error. Attached is a new specification incorporating the previous and the new amendments. It is respectfully requested that the new, replacement specification be accepted to avoid further confusion and to facilitate prosecution. Attached is a Declaration of the undersigned asserting that no new matter has been introduced.

Also attached is a new sequence listing correcting the sequence of Seq. ID No. 43 and adding sequences 81 and 82. It is respectfully requested that the amended specification and sequence listing be entered into the file.

Claims 11-13, 18, 21, 26 and 27 have been rejected under 35 U.S.C. 101 as drawn to a product of nature. The claims have been amended to recite a purified ligand.

The rejection of claims 11-13, 18, 21-24, 26-27 under 35 U.S.C. 112, first paragraph is not understood. However, to the extent it is understood, it is traversed. Does the examiner mean to urge that the making of a short sequence of amino acids is not known in the art? Note that the independent claims clearly claim the most preferred sequence (TSQNVRT), as well as other preferred sequences.

The examiner also urges that the specification fails to teach how to "make a composition comprising of (sic) a sample suspected

to contain a bacterial spore." The invention does not required making a sample containing anthrax any more than one makes blood having sugar to do a blood sugar test. The sample being tested is placed in an environment to see if organisms are present. See page 15. The making of supports with indicators is so common as to be known to any skilled in the art.

Claims 11-13, 18, 21-24 and 26-27 have been rejected under 35 U.S.C. 112, second paragraph as being indefinite. The rejection is respectfully traversed. Claims are read in light of the description. A composition must have those components listed. However, it is customary to identify only those components that are required. The claims are to compositions. Regarding claim 22, the claim clearly states that the ligand is bound to the support. It is not seen why the meaning is obscure to the examiner.

Regarding claim 12, any one skilled in the art that is at all acquainted with anthrax knows that the support would be placed in the environment suspected of having anthrax organisms present.

Regarding claim 13, one of ordinary skill knows well what a sponge or tape is. The words are meant to carry their ordinary meaning.

Claims 21 had been rejected as anticipated under 35 U.S.C. 102(b). The rejection is respectfully traversed. There is no teaching in the art to show that any sequence of 5 to 12 mers should be placed in a sample suspected of containing spores.

Claims 11-13, 18, 21-24 and 26-27 have been rejected under 35

U.S.C. 103(a) as unpatentable over Ezzell et al in view of D'Mello. Ezzell teaches a composition comprising a monoclonal antibody (much larger protein) and D'Mello suggests a ligand binding to a monoclonal antibody not a spore. Neither suggests in any way the use of ligands of 5-12 mer that bind to spores.

Regarding the rejection of claim 11, that a polymeric support is known for ligands binding to an antibody has nothing to do with small peptides which bind to spores.

The examiner admits that claim 23 is free of prior art.

It is believed the claims are now in condition for allowance. If discussion would facilitate prosecution of this application, the Examiner is invited to contact the Applicant's representative at (703) 425-8405.

Respectfully submitted,


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